

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|---|--------------------|------------------|---------|------------------|
| L1 | 7076 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror)) and (((electron adj beam) or (e adj beam) or evaporat\$6 or vaporiz\$8) with (Hf or hafnium or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3")) and (("no" or "not" or "without") near4 (heat\$4 or ion or bombard\$7 or energy)) | US-PGPUB; USPAT | OR | ON | 2005/03/29 13:37 |
| L2 | 79 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or stack or mirror)) and (((electron adj beam) or (e adj beam) or evaporat\$6 or vaporiz\$8) with (Hf or hafnium or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3")) and (("no" or "not" or "without") near4 (heat\$4 or ion or bombard\$7 or energy) with (substrate or base or workpiece or mirror or coat\$4)) | US-PGPUB; USPAT | OR | ON | 2005/03/29 13:45 |
| L3 | 79 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or stack or mirror)) and (((electron adj beam) or (e adj beam) or evaporat\$6 or vaporiz\$8) with (Hf or hafnium or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3")) and (("no" or "not" or "without") near4 (heat\$4 or ion or bombard\$7 or energy) with (substrate or base or workpiece or mirror or coat\$4)) | US-PGPUB; USPAT | OR | ON | 2005/03/29 13:49 |

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|----|-----|---|----------------------------|----|----|------------------|
| L4 | 2 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or stack or mirror)) and (((electron adj beam) or (e adj beam) or evaporat\$6 or vaporiz\$8) with (Hf or hafnium or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3")) and (("no" or "not" or "without") near4 (heat\$4 or ion or bombard\$7 or energy) with (substrate or base or workpiece or mirror or coat\$4)) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/29 13:47 |
| L5 | 610 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or stack or mirror)) and (((electron adj beam) or (e adj beam) or evaporat\$6 or vaporiz\$8) with (Hf or hafnium or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3")) and (temperature with (substrate or base or workpiece or mirror or coat\$4)) | US-PGPUB; USPAT | OR | ON | 2005/03/29 13:49 |
| L6 | 211 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or stack or mirror)) and (((electron adj beam) or (e adj beam) or evaporat\$6 or vaporiz\$8) with (Hf or hafnium or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3")) same (temperature with (substrate or base or workpiece or mirror or coat\$4))) | US-PGPUB; USPAT | OR | ON | 2005/03/29 14:03 |
| L7 | 0 | (hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") and "5726919".pn. | US-PGPUB; USPAT | OR | ON | 2005/03/29 13:57 |

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| L8 | 16 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or stack or mirror)) and (((electron adj beam) or (e adj beam) or evaporat\$6 or vaporiz\$8) with (Hf or hafnium or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3")) same (temperature with (substrate or base or workpiece or mirror or coat\$4))) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/29 14:05 |
| L9 | 1 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or stack or mirror) with density with (determin\$9 or optimiz\$9 or optimal\$8 or based or depend\$7)) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/29 14:06 |
| L10 | 21 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or stack or mirror) with density with (determin\$9 or optimiz\$9 or optimal\$8 or based or depend\$7)) | US-PGPUB; USPAT | OR | ON | 2005/03/29 14:09 |
| L11 | 149 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or stack or mirror) with density) | US-PGPUB; USPAT | OR | ON | 2005/03/29 14:21 |
| L12 | 128 | L11 not L10 | US-PGPUB; USPAT | OR | ON | 2005/03/29 14:14 |
| L13 | 0 | "5618575".pn. and (hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") | US-PGPUB; USPAT | OR | ON | 2005/03/29 14:14 |
| L14 | 14 | (electron adj beam) same (density near3 (depend\$6 or based or determin\$9) with temperature) | US-PGPUB; USPAT | OR | ON | 2005/03/29 14:25 |
| L15 | 11 | (electron adj beam) same (density with temperature with oxide) | US-PGPUB; USPAT | OR | ON | 2005/03/29 14:23 |

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|-----|-----|---|----------------------------|----|----|------------------|
| L16 | 3 | ("427"/\$.ccls. and (density near3 (depend\$6 or based or determin\$9) with temperature with oxide) | US-PGPUB; USPAT | OR | ON | 2005/03/29 14:26 |
| L17 | 138 | ("427"/\$.ccls. and (density near3 (depend\$6 or based or determin\$9) with temperature) | US-PGPUB; USPAT | OR | ON | 2005/03/29 14:28 |
| L18 | 223 | (density with (oxide or coat\$4 or film or layer) with (depend\$6 or based or determin\$9 or function) with temperature with substrate) | US-PGPUB; USPAT | OR | ON | 2005/03/29 14:36 |
| L19 | 42 | L18 and (electron adj beam) | US-PGPUB; USPAT | OR | ON | 2005/03/29 14:29 |
| L20 | 29 | (porosity with (oxide or coat\$4 or film or layer) with (depend\$6 or based or determin\$9 or function) with temperature with substrate) | US-PGPUB; USPAT | OR | ON | 2005/03/29 14:38 |
| L21 | 195 | (porosity with (oxide or coat\$4 or film or layer) with temperature with substrate) | US-PGPUB; USPAT | OR | ON | 2005/03/29 14:38 |
| L22 | 28 | L21 and (electron adj beam) | US-PGPUB; USPAT | OR | ON | 2005/03/29 14:38 |
| S1 | 1 | "5733042".pn. | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:06 |
| S2 | 161 | (Bernard.in. or Dijon.in. or Rafin.in.) and (hafnia or (hafnium adj \$3oxide) or HfO2 or HfO or "HfO. sub.2") | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:20 |
| S3 | 7 | (Bernard.in. or Dijon.in. or Rafin.in.) and ((hafnia or (hafnium adj \$3oxide) or HfO2 or HfO or "HfO. sub.2") with (amorphous or noncrystal\$6 or (non adj crystal\$7) or void or pore or porous or porus or density)) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:09 |
| S4 | 2 | (Bernard.in. or Dijon.in. or Rafin.in.) and ((hafnia or (hafnium adj \$3oxide) or HfO2 or HfO or "HfO. sub.2") with (amorphous or noncrystal\$6 or (non adj crystal\$7) or void or pore or porous or porus or density)) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/28 15:10 |
| S5 | 2 | (Bernard.in. or Dijon.in. or Rafin.in.) and ((hafnia or (hafnium adj \$3oxide) or HfO2 or HfO or "HfO. sub.2") same (vacuum or evaporat\$6 or (electron adj (beam or gun)))) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/28 15:12 |

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| S6 | 8 | (Bernard.in. or Dijon.in. or Rafin.in.) and ((hafnia or (hafnium adj \$3oxide) or HfO2 or HfO or "HfO. sub.2") same (vacuum or evaporat\$6 or (electron adj (beam or gun)))) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:12 |
| S7 | 10 | (Bernard.in. or Dijon.in. or Rafin.in.) and ((hafnia or (hafnium adj \$3oxide) or HfO2 or HfO or "HfO. sub.2") same (cold or (room adj temperature) or cool\$4)) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:14 |
| S8 | 0 | (Bernard.in. or Dijon.in. or Rafin.in.) and ((hafnia or (hafnium adj \$3oxide) or HfO2 or HfO or "HfO. sub.2") same (cold or (room adj temperature) or cool\$4)) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/28 15:30 |
| S9 | 1 | (Bernard.in. or Dijon.in. or Rafin.in.) and ((hafnia or (hafnium adj \$3oxide) or HfO2 or HfO or "HfO. sub.2") same ("without" near3 (energy or ion or plasma or heat\$4)))) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/28 15:31 |
| S10 | 1 | (Bernard.in. or Dijon.in. or Rafin.in.) and ((hafnia or (hafnium adj \$3oxide) or HfO2 or HfO or "HfO. sub.2") same ("without" near3 (energy or ion or plasma or heat\$4)))) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:16 |
| S11 | 142 | S2 not (S3 or S4 or S6 or S7 or S10) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:16 |
| S12 | 34 | (Bernard.in. or Dijon.in. or Rafin.in.) and (hafnia or (hafnium adj \$3oxide) or HfO2 or HfO or "HfO. sub.2") | USOCR | OR | ON | 2005/03/28 15:19 |
| S13 | 2336 | (427/162,164,166).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/03/28 15:19 |
| S14 | 1351 | (427/255.23,255.31,255.7).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/03/28 15:19 |
| S15 | 1098 | (427/294).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/03/28 15:19 |
| S16 | 466 | (427/419.3).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/03/28 15:19 |
| S17 | 1546 | (359/584,588,589,838).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/03/28 15:19 |
| S18 | 6378 | S13 S14 S15 S16 S17 | US-PGPUB; USPAT | OR | ON | 2005/03/29 10:07 |

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|-----|-----|---|----------------------------|----|----|------------------|
| S19 | 7 | S18 and ((hafnia or (hafnium adj \$3oxide) or HfO2 or HfO or "HfO.sub.2") with (pore or porous or porus or porosity or void or amorphous or amorphus or noncrystal\$6 or (non adj crystal\$5)) with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6)) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:22 |
| S20 | 8 | S18 and ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2") with (pore or porous or porus or porosity or void or amorphous or amorphus or noncrystal\$6 or (non adj crystal\$5)) with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6)) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:22 |
| S21 | 8 | S18 and ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2") with (pore or porous or porus or porosity or void or amorphous or amorphus or noncrystal\$6 or (non adj crystal\$5)) with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror)) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:25 |
| S22 | 10 | S18 and ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2") with (pore or porous or porus or porosity or void or amorphous or amorphus or noncrystal\$6 or (non adj crystal\$5) or density) with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror)) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:26 |
| S23 | 601 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2") with (pore or porous or porus or porosity or void or amorphous or amorphus or noncrystal\$6 or (non adj crystal\$5) or density) with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror)) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:37 |
| S24 | 180 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2") with (pore or porous or porus or porosity or void or amorphous or amorphus or noncrystal\$6 or (non adj crystal\$5) or density) with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror)) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/28 15:27 |

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|-----|-----|---|----------------------------|----|----|------------------|
| S25 | 8 | S24 and ((vacuum near3 (deposit\$5 or evaporat\$5 or vapor\$9)) or (electron adj beam) or (react\$5 near3 evaporat\$5)) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/28 15:39 |
| S26 | 13 | S24 and (cold or (room adj temperature) or cool\$4) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/28 15:41 |
| S27 | 2 | S24 and ("without" near3 (energy or ion or plasma or heat\$4)) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/28 15:43 |
| S28 | 159 | S24 not (S25 or S26 or S27) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/28 15:32 |
| S29 | 601 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (pore or porous or porus or porosity or void or amorphous or amorphus or noncrystal\$6 or (non adj crystal\$5) or density) with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror)) | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:05 |
| S30 | 0 | S29 same ((vacuum near3 (deposit\$5 or evaporat\$5 or vapor\$9)) or (electron adj beam) or (react\$5 near3 evaporat\$5)) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/28 15:39 |
| S31 | 21 | S29 same ((vacuum near3 (deposit\$5 or evaporat\$5 or vapor\$9)) or (electron adj beam) or (react\$5 near3 evaporat\$5)) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:39 |
| S32 | 17 | S29 same (cold or (room adj temperature) or cool\$4) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:42 |
| S33 | 1 | S29 same ("without" near3 (energy or ion or plasma or heat\$4)) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:43 |
| S34 | 12 | S29 and ((protect\$5 or damag\$5) with laser) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:44 |
| S35 | 288 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror) same (cool\$3 or cold or (room adj temperature))) | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:49 |
| S36 | 7 | S35 and S18 | US-PGPUB; USPAT | OR | ON | 2005/03/28 15:48 |

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|-----|----|--|----------------------------------|----|----|------------------|
| S37 | 1 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror) same ((reactive adj evaporat\$5) with (Hf or hafnium) with (O2 or oxygen or "O.sub.2")))) | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:00 |
| S38 | 25 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror) same ((evaporat\$5) with (Hf or hafnium) with (O2 or oxygen or "O.sub.2")))) | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:24 |
| S39 | 9 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror) same ((evaporat\$5) with (Hf or hafnium) with (O2 or oxygen or "O.sub.2")))) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/28 16:03 |
| S40 | 56 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") near3 (amorphous or amorphus) with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror)) | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:19 |
| S41 | 56 | S40 and S29 | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:07 |
| S42 | 28 | S40 and (substrate with temperature) | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:09 |
| S43 | 28 | S40 not S42 | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:09 |
| S44 | 16 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") near3 (amorphous or amorphus) with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror)) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/29 10:08 |

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|-----|-----|---|----------------------------|----|----|------------------|
| S45 | 318 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (silica or SiO2 or "SiO.sub.2" or SiO or (silicon adj \$3oxide)) with (mirror or multilayer or (multi adj layer) or stack or reflect\$6)) | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:20 |
| S46 | 356 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (silica or SiO2 or "SiO.sub.2" or SiO or (silicon adj \$3oxide)) with (mirror or multilayer or (multi adj layer) or stack or reflect\$6 or (alternat\$6 near2 layer))) | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:21 |
| S47 | 22 | S46 and S18 | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:21 |
| S48 | 17 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror) and ((evaporat\$5) with (Hf or hafnium) same (O2 or oxygen or "O.sub.2")))) and (temperature near2 room) | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:29 |
| S49 | 24 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror) and ((evaporat\$5) with (Hf or hafnium) same (O2 or oxygen or "O.sub.2")))) and (temperature with substrate) | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:29 |
| S50 | 2 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror) and ((evaporat\$5) with (Hf or hafnium) same (O2 or oxygen or "O.sub.2")))) and (temperature with substrate) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/28 16:28 |

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|-----|------|---|----------------------------|----|-----|------------------|
| S51 | 0 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror) and ((evaporat\$5) with (Hf or hafnium) same (O2 or oxygen or "O.sub.2")))) and (temperature near2 room) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/28 16:29 |
| S52 | 19 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror) and ((evaporat\$5) with (Hf or hafnium) same (O2 or oxygen or "O.sub.2") same (temperature))) | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:30 |
| S53 | 1702 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror) same temperature) | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:33 |
| S54 | 309 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror) same temperature) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/28 16:31 |
| S55 | 40 | S53 and S18 | US-PGPUB; USPAT | OR | ON | 2005/03/28 16:33 |
| S56 | 2336 | (427/162,164,166).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/03/29 10:07 |
| S57 | 1353 | (427/255.23,255.31,255.7).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/03/29 10:07 |
| S58 | 1098 | (427/294).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/03/29 10:07 |
| S59 | 466 | (427/419.3).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/03/29 10:07 |
| S60 | 1547 | (359/584,588,589,838).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/03/29 10:07 |
| S61 | 6381 | S56 S57 S58 S59 S60 | US-PGPUB; USPAT | OR | ON | 2005/03/29 10:07 |

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|-----|-----|---|----------------------------------|----|----|------------------|
| S62 | 18 | S61 and ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror)).ti,ab. | US-PGPUB; USPAT | OR | ON | 2005/03/29 10:12 |
| S63 | 479 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror) same (amorphous or amorphus)) | US-PGPUB; USPAT | OR | ON | 2005/03/29 10:44 |
| S64 | 95 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror) same (amorphous or amorphus)) | EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/03/29 10:13 |
| S65 | 38 | S63 and (((electron adj beam) or (e adj beam) or evaporat\$6 or vaporiz\$8) with (Hf of hafnium)) | US-PGPUB; USPAT | OR | ON | 2005/03/29 10:23 |
| S66 | 8 | S63 and S61 | US-PGPUB; USPAT | OR | ON | 2005/03/29 10:24 |
| S67 | 437 | S63 not (S65 or S66) | US-PGPUB; USPAT | OR | ON | 2005/03/29 10:24 |
| S68 | 12 | ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror) same (amorphous or amorphus)) | USOCR | OR | ON | 2005/03/29 10:47 |
| S69 | 17 | ("427"/\$).cccls. and ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror)) and (((electron adj beam) or (e adj beam) or evaporat\$6 or vaporiz\$8) with (Hf of hafnium)) | USOCR | OR | ON | 2005/03/29 10:48 |

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|-----|----|---|--------------------|----|----|------------------|
| S70 | 75 | ("427"/\$.ccls. and ((hafnia or ((hafnium or Hf) near4 \$3oxide) or HfO2 or HfO or "HfO.sub.2" or Hf2O3 or "Hf.sub.2O.sub.3" or "Hf.sub.2 O.sub.3") with (deposit\$4 or coat\$4 or film or \$5layer or evaporat\$6 or stack or mirror)) and (((electron adj beam) or (e adj beam) or evaporat\$6 or vaporiz\$8) with (Hf of hafnium)) | US-PGPUB; USPAT | OR | ON | 2005/03/29 13:33 |
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